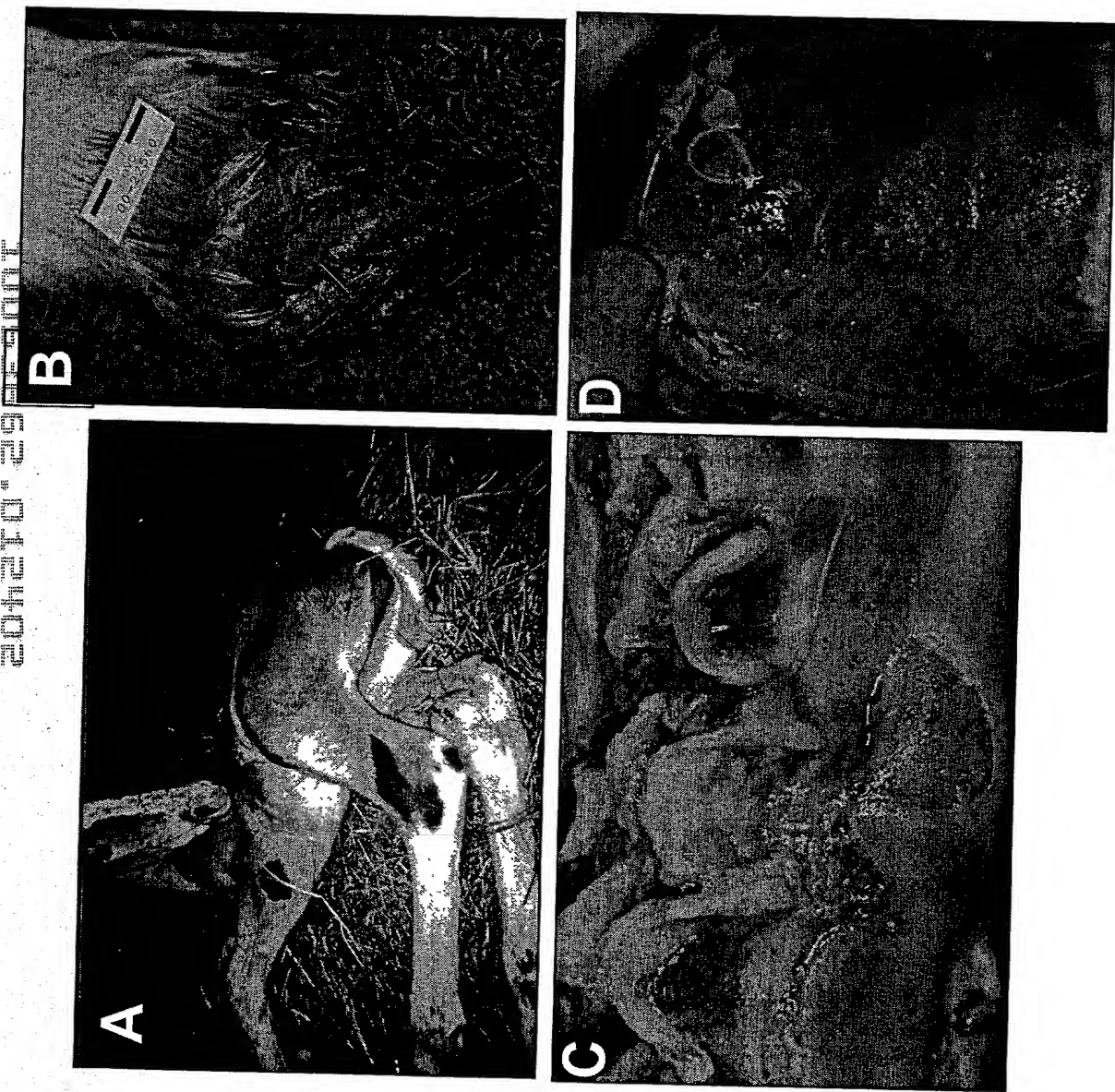


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FIG. 1



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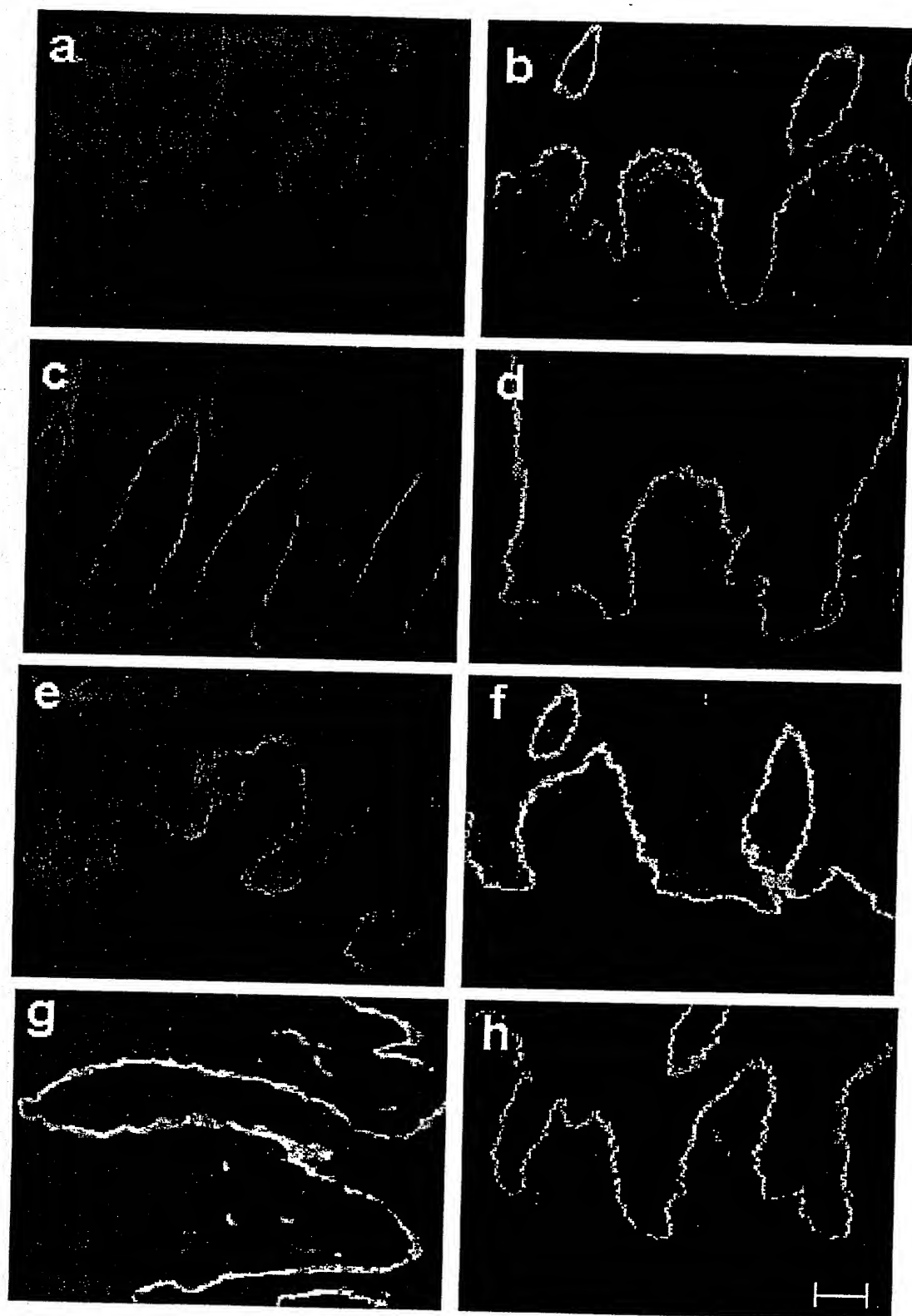


FIG. 2

5'TGGGTCCTCCTTATTCACAGG -177

TGAGTCACACCCTGAAACACAGGCTCTCTTCTGTGTCAGGACTGAGTCAGGTTAGAAGAGTCCGATAAACCACCTGATCAAGGAAAAG -91

GAAGGCACAGCGGAGCGCAGAGTGAGAACTCCCAGCGGCGAGGCGCGGGCAGCGACCCCTGCAGCGGCGGACCGCGCGCGGCTGGCC -1

ATGCCTGCGCTCTGGCTGAGCTGTACCTCTGCTTCTCGCTCTCTGCCCCAGCCCCGGGCCACCTCCGGGAGGGAAGTCTGTGATTGC 90

M P A L W L S C Y L C F S L L L P A A R A T S G R E V C D C 30

AAACGGGAAGTCCAGGCAATGCATCTTTGACCAGGAACCTTCAAAACAGACAGGAAATGGATTCCGCTGCCTCAACTGCAATGACAACACT 180

N G K S R Q C I F D Q E L H K Q T G N G F R C L N C N D N T 60

GATGGCATCCACTGCGAGAGGTGCAAGGCAGGATTTTACCGACAGAGAGAAAGGACCGCTGTTTACCTGCAATTGTAACCTCTAAAGGT 270

D G I H C E R C K A G F Y R Q R E R D R C L P C N C N S K G 90

TCTCTTAGCGCTCGATGTGACAACCTCTGGACGGTGACGCTGTAAGCCAGGTGTGACAGGAGACAGGTGTGACCGATGTCTGCCCCGCTTC 360

S L S A R C D N S G R C S C K P G V T G D R C D R C L P G F 120

CACACACTACTGATGCTGGGTGCGCCCAAGACCAAAGGCTGCTAGACTCCAAGTGTGACTGTGACCCAGCTGGCATCTCAGGGCCCTGT 450

H T L T D A G C A Q D Q R L L D S K C D C D P A G I S G P C 150

GACTCAGGCCGCTGTGTCTGCAAGCCGGCTGTCACTGGAGAGCGCTGTGATAGGTGTGACCCAGGTTACTATCACCTGGATGGGGGAAAC 540

D S G R C V C K P A V T G E R C D R C R P G Y Y H L D G G N 180

CCTCAGGGCTGTACCCAGTGTTTTTTGTCTATGGGCATTCCGCCAGCTGCCACAGCTCTGGGGACTACAGTGTCCATAAAATCATCTCTGCC 630

P Q G C T Q C F C Y G H S A S C H S S G D Y S V H K I I S A 210

TTCCATCAAGATGTTGATGGCTGGAAGGCTGTCCAAAGAAACGGGTCTCCTGCAAAAGCTCCAGTGGTCACAGCGCCATCGGGATATATTT 720

F H Q D V D G W K A V Q R N G S P A K L Q W S Q R H R D I F 240

AGCTCAGCACGACGATCAGACCCTGTCTATTTTGTAGCTCCTGCCAAATTTCTTGGGAATCAACAGGTGAGCTACGGGCAAAGCCTATCT 810

S A R R S D P V Y F V A P A K F L G N Q Q V S Y G Q S L S 270

TTTACTACCGTGTGGATAGGGGAGGCAGACCCCATCTGCCCATGACGTGATCCTGGAAGGTGCTGCTTACGGATCACAGCTCCCTTG 900

F Y R V D R G G R H P S A H D V I L E G A G L R I T A P L 300

ATGCACTTAGCAAGACACTGCCTTGTGGGATCACCAAGACTTACACATTAGATTAAATGAACATCCAAGCAGTAATGGAGCCCCCAG 990

M P L S K T L P C G I T K T Y T F R L N E H P S S N W S P Q 330

CTAAGTTACTTTGAGTATCGGAGGTTACTGCGGAACCTCACAGCCCTGCGGATCCGAGCTACCTACGGAGAATACAGTACTGGGTACATT 1080

L S Y F E Y R R L L R N L T A L R I R A T Y G E Y S T G Y I 360

GACATCGTGACCTTGATTTAGCCCCCCCCGTTTCTGGAGCCCCAGCGCCCTGGGTTGAACAATGTGTATGCCCTGTGGCTACAAGGGG 1170

D N V T L I S A R P V S G A P A P W V E P C V C P V G Y K G 390

CAGTTCTGCCAGGATTGTGCTTCCGGCTACAAAAGAGATTAGCCAGACTGGGACCTTTTGGCACCTGTATTCCATGTAAGTCCCAAGGG 1260

Q F C Q D C A S G Y K R D S A R L G P F G T C I P C N C Q G 420

GGAGGGGCTGCGATCCAGACACAGGAGACTGTACTCAGGGGATGAGAACCCTGACATCCCTGAGTGTGCTGACTGCCCCATTGGTTTC 1350

G G A C D P D T G D C Y S G D E N P D I P E C A D C P I G F 450

TACAACGATCCACAAGACCCCCGAGCTGCAAGCCGTGCCCTGTGCAATGGGTTTCACTGCTCCGTGATGCCTGAGACAGAGGAGGTG 1440

Y N D P Q D P R S C K P C P C R N G F S C S V M P E T E E V 480

GTGTGCAATAACTGCCCCAGGGTGTCACTGGTGCCCGCTGTGAGCTCTGTGCTGATGGCTATTTTGGGGACCCCTTCGGGGAACGTGGC 1530

V C N N C P Q G V T G A R C E L C A D G Y F G D P F G E R G 510

CCAGTGAGGCCTTGTGAGCCCTGTGAGTGAACAACACGTGGACCTAGTGCCCTCCGGGAACGTGACCGCCTGACAGGCAGGTGTCTG 1620

P V R P C Q P C Q C N N N V D P S A S G N C D R L T G R C L 540

AAGTGCATCCACAACACAGCTGGGGTCCACTGTGACCAAGTGCAAAGCAGGCTACTATGGGGACCCGTTGGCTCCCAATCCAGCAGACAAG 1710

K C I H N T A G V H C D Q C K A G Y Y G D P L A P N P A D K 570

TGTCGAGCTTGAACCTGCAACCCAGTGGGCTCGGAGCCTGTGGAGTGTGCAAGTGTGAGTGTGTTTGAAGCCAGGCTTTGGTGGC 1800

C R A C N C N P V G S E P V E C R S D G S C V C K P G F G G 600

FIG. 3

CTCAGCTGTGAGCATGCGGCACTGACCAGCTGTCCAGCTTGCTATAATCAAGTGAAGGTTGAGATGGATCAGTTTATGCAGCAGCTCCAG 1890  
L S C E H A A L T S C P A C Y N Q V K V Q M D Q F M Q Q L Q 630  
└─┬─┘ Dom. I/II  
ATCTGGAGGCCCTGATTTCAAGGCTCAGGGTGGAGCAGTACCCAACGCAGAGCTGGAAGGCAGGATGCAGCAGGCTGAGCAGGCCCTT 1980  
I L E A L I S K A Q G G A V P N A E L E G R M Q Q A E Q A L 660  
CGGGACATTCTGAGAGAAGCCAGATTTCAAGATGCTGTTAGATCCTTCAATCTCCGGGTGGCCAAGGCAAGGACTCAAGAGAATAGC 2070  
R D I L R E A Q I S Q D A V R S F N L R V A K A R T Q E N S 690  
TACCGGGACCGCTGGATGACCTCAAGATGACTGTGGAAGAGTTCGGGCCCTGGGCAGTCAGTATCAGAACCAAGTTCAGGATACTCGC 2160  
Y R D R L D D L K M T V E R V R A L G S Q Y Q N Q V Q D T R 730  
AGGCTCATCACTCAGATGCGCTGAGCCTGGAGGAAAGTGAGGCTTCCCTGCAAAACACCAACATTCCTCCTTCAGAGCACTACGTGGGG 2250  
R L I T Q M R L S L E E S E A S L Q N T N I P P S E H Y V G 750  
CCAAATGGCTTTAAAGTCTGGCTCAGGAGGCCACGAGATTGGCAGACAGCCATGTTCACTCAGCCAGTAACATGGAGCAACTGGCAAAG 2340  
P N G F K S L A Q E A T R L A D S H V Q S A S N M E Q L A K 780  
GAAACCCAGGAGTATTCCAAAGAGCTGATGTCACTGGTGCAGGAGGCTCTGCGAGGAAGGAGGCGGAAGCGGCAGCCTGGACGGAGCCGTG 2430  
E T Q E Y S K E L M S L V R E A L Q E G G G S G S L D G A V 810  
GTGCAAGGCTTGTGGGAAATTCAGAAAACTAAATCTCTGGCCAGGAGTTGTGCGAGGGAGGCCACGCAACCGACATGGAAGCAGAT 2520  
V Q R L V G K L Q K T K S L A Q E L S R E A T Q T D M E A D 840  
AGGCTTATCAGCATAGTCTCCACCTTCTCAATCCGTGTCTCAGATTGAGGAGTCAATGATCAGTCTTGCAGGTAGAAGCGAAGAGG 2610  
R Y Q H S L H L L N S V S Q I Q G V N D Q S L Q V E A K R 870  
CTCAGCAAAAAAGCTGATTCTCTCTCAAACCGTGTGACTAAGCATATGGATGAGTTCAAGCACGTGCAAGCAATCTGGGAAACTGGGAA 2700  
L Q K A D S L S N R V T K H M D E F K H V Q S N L G N W E 900  
GAAGCAACCCGGCAGCTCTTACAGAATGGAAGAAATGGGAGACAGACATCAGATCAGCTGCTTTCCCGTGCCAACCTTGCTAAAAGCAGA 2790  
E T R Q L L Q N G K N G R Q T S D Q L L S R A N L A K S R 930  
GCCCAAGAGCACTAAGTATGGGCAATGCCACTTTTTATGAAGTTGAGAATCTTAAAGAATCTCAGAGAGTTTGACCTGCAGGTGGA 2880  
A Q E A L S M G N A T F Y E V E N I L K N L R E F D L Q V G 960  
GATCAAGAGCAGAAGCTGAAGAGGCCATGAAGAGACTCTCTACATCAGCCAGAAGGTTGCAGGTGCCAGTGACAAGACGAAGCAAGCA 2970  
D R A E A E E A M K R L S Y I S Q K V A G A S D K T K Q A 990  
GAAGCAGCCCTGGGCAGTGTGCTGCCGACGCCAGAGGGCAAGAATGCAGCCAGGGAGGCCCTGGAGATCTCTGGCAAGATAGAACAG 3060  
E A A L G S A A A D A Q R A K N A A R E A L E I S G K I E Q 1020  
GAGATAGGAGGTCTGAACCTTGAAGCCAATGTGACAGCAGATGGAGCCTTGCCATGGAGAAGGACTGGCCACTCTGAAAAGTGAGATG 3150  
E I G G L N L E A N V T A D G A L A M E K G L A T L K S E M 1050  
AGAGAAGTGAAGGAGAGCTGTCAAGGAAGGAGCAGGAGTTTGACATGGATATGGACGCAGTGAGATGGTAATTGCAGAGGCCCAAAGA 3240  
R E V E G E L S R K E Q E F D M D M D A V Q M V I A E A Q R 1080  
GTTGAAAAACAGAGCCAAGAATGCTGGAGTTACGATCCAAGACACACTCAACACATTGGATGGCATCCTACACCTAATAGACCAGCCTGGC 3330  
V E N R A K N A G V T I Q D T L N T L D G I L H L I D Q P G 1110  
AGTGTGGATGAAGAGAGGCTGATCTTACTGGAGCAGAAGCTTTTCCGAGCCAAGACTCAGATCAACAGCCAGCTACGGCCCTTGATGTCA 3420  
S V D E E R L I L L E Q K L F R A K T Q I N S Q L R P L M S 1140  
GAGCTGGAAGAGAGGGCACATCGGCAGAAGGGCCACCTCCGTTTCTGAGACTAGCATAGATGGGATTCTGGCTGATGTGAAGAACCTG 3510  
E L E E R A H R Q K G H L R F L E T S I D G I L A D V K N L 1170  
GAGAATCATCAGGGACAACCTGCCCCGGGCTGCTACAATACCCAGGCTCTTGAGCAACAGTgaagctgccttagagattttctcaaccaag 3600  
E N I R D N L P P G C Y N T Q A L E Q Q \* 1190  
gttcttgggattcagacctagctgccttagagattttctcaaccaaggttcttgggattcagacctcagggctcaggagcccgcatgcggg 3690  
tggggtgggatgggaatatttgaatatgttgatgcgtgtgctcaggccccagtgaaacctgatcccatccctgagacctcgccagataa 3780  
atgtctttattg 3789-3'

**FIG. 3 cont'd**

horse	1	MPALWLSCL	LFCSLLP	PARATS	SRVDCNG	NGSRQCI	FQELH	KQIGN	FFCLNC	NTND	GH	HCRC	KAFYQ	QRRDR	CLPC	NCN	SGSL	SARCD	NSG
man	1	MPALWLSCL	LFCSLLP	PARATS	SRVDCNG	NGSRQCI	FQELH	KQIGN	FFCLNC	NTND	GH	HCRC	KAFYQ	QRRDR	CLPC	NCN	SGSL	SARCD	NSG
mouse	1	MPALWLSCL	LFCSLLP	PARATS	SRVDCNG	NGSRQCI	FQELH	KQIGN	FFCLNC	NTND	GH	HCRC	KAFYQ	QRRDR	CLPC	NCN	SGSL	SARCD	NSG
horse	101	RCCKPGVTC	PCDRCL	PGFHL	TDAGC	QDQRL	LD	SKDCD	PAGI	SGPCD	SR	CVCK	PAVTE	RCDRC	RGYV	HL	DGN	PQC	TQC
man	101	RCCKPGVTC	PCDRCL	PGFHL	TDAGC	QDQRL	LD	SKDCD	PAGI	SGPCD	SR	CVCK	PAVTE	RCDRC	RGYV	HL	DGN	PQC	TQC
mouse	101	RCCKPGVTC	PCDRCL	PGFHL	TDAGC	QDQRL	LD	SKDCD	PAGI	SGPCD	SR	CVCK	PAVTE	RCDRC	RGYV	HL	DGN	PQC	TQC
horse	201	DYSVHKI	TS	EFHQD	VDG	WKA	VORNG	S	PAKL	W	SARR	SD	PVY	VAP	KFL	GN	QV	YS	GOS
man	201	DYSVHKI	TS	EFHQD	VDG	WKA	VORNG	S	PAKL	W	SARR	SD	PVY	VAP	KFL	GN	QV	YS	GOS
mouse	201	DYSVHKI	TS	EFHQD	VDG	WKA	VORNG	S	PAKL	W	SARR	SD	PVY	VAP	KFL	GN	QV	YS	GOS
horse	301	MPISKTLP	PCG	ITKTY	FR	NEHP	SS	W	SPQ	LS	YF	YR	LL	R	N	L	T	A	L
man	301	MPISKTLP	PCG	ITKTY	FR	NEHP	SS	W	SPQ	LS	YF	YR	LL	R	N	L	T	A	L
mouse	301	MPISKTLP	PCG	ITKTY	FR	NEHP	SS	W	SPQ	LS	YF	YR	LL	R	N	L	T	A	L
horse	400	YKDSARL	GP	PGTC	IP	CN	C	G	G	A	C	D	P	D	T	G	C	V	S
man	400	YKDSARL	GP	PGTC	IP	CN	C	G	G	A	C	D	P	D	T	G	C	V	S
mouse	401	YKDSARL	GP	PGTC	IP	CN	C	G	G	A	C	D	P	D	T	G	C	V	S
horse	500	GYFGDP	FG	EG	FP	VR	PC	PC	Q	C	N	N	V	D	P	S	A	S	C
man	499	GYFGDP	FG	EG	FP	VR	PC	PC	Q	C	N	N	V	D	P	S	A	S	C
mouse	500	GYFGDP	FG	EG	FP	VR	PC	PC	Q	C	N	N	V	D	P	S	A	S	C
horse	600	GSCEHA	ALT	SC	PAC	YN	QV	K	Q	M	D	P	M	O	Q	L	I	E	A
man	599	GSCEHA	ALT	SC	PAC	YN	QV	K	Q	M	D	P	M	O	Q	L	I	E	A
mouse	600	GSCEHA	ALT	SC	PAC	YN	QV	K	Q	M	D	P	M	O	Q	L	I	E	A
horse	697	DLKNTV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV
man	697	DLKNTV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV
mouse	700	DLKNTV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV	RV
horse	797	LSG	--	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS
man	797	LSG	--	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS
mouse	800	LSG	--	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS	SGGS	LS
horse	894	SLGNW	EE	TR	Q	L	Q	N	G	R	Q	T	S	D	L	S	R	A	N
man	897	SLGNW	EE	TR	Q	L	Q	N	G	R	Q	T	S	D	L	S	R	A	N
mouse	897	SLGNW	EE	TR	Q	L	Q	N	G	R	Q	T	S	D	L	S	R	A	N
horse	994	LSAA	AD	A	Q	R	A	K	N	A	R	E	A	L	E	I	S	E	I
man	997	LSAA	AD	A	Q	R	A	K	N	A	R	E	A	L	E	I	S	E	I
mouse	997	LSAA	AD	A	Q	R	A	K	N	A	R	E	A	L	E	I	S	E	I
horse	1094	DTANT	LD	G	I	L	H	L	D	P	G	S	V	D	E	R	L	L	E
man	1097	DTANT	LD	G	I	L	H	L	D	P	G	S	V	D	E	R	L	L	E
mouse	1096	DTANT	LD	G	I	L	H	L	D	P	G	S	V	D	E	R	L	L	E

FIG. 4

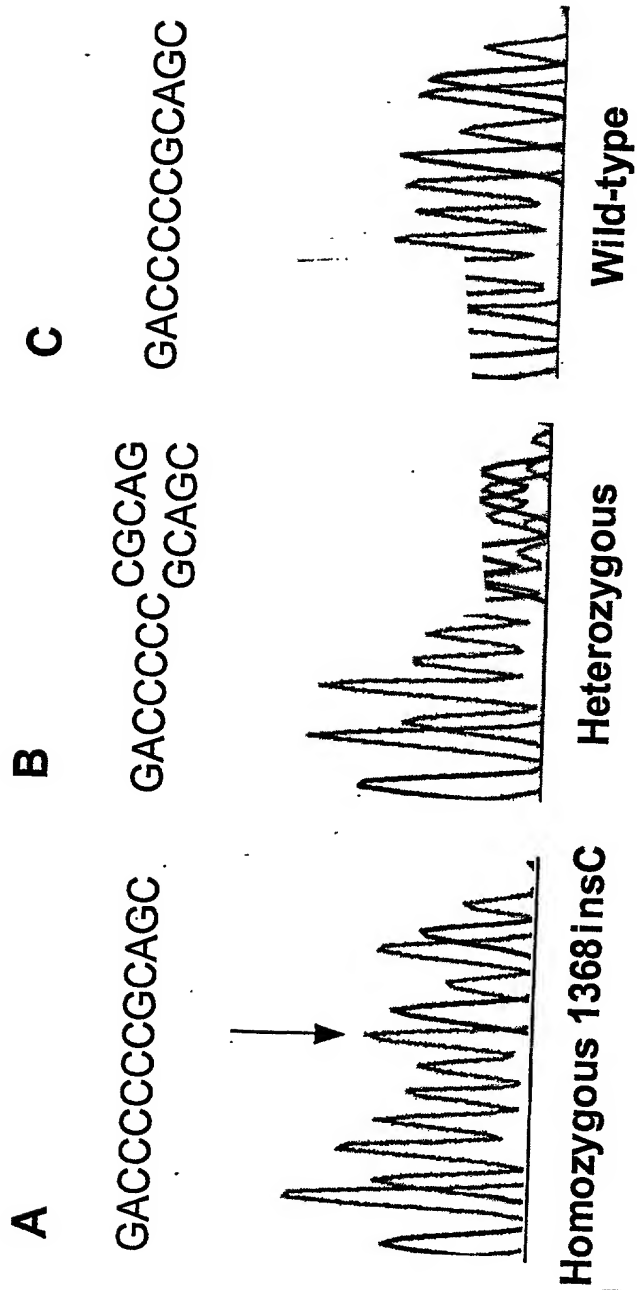


FIG. 5

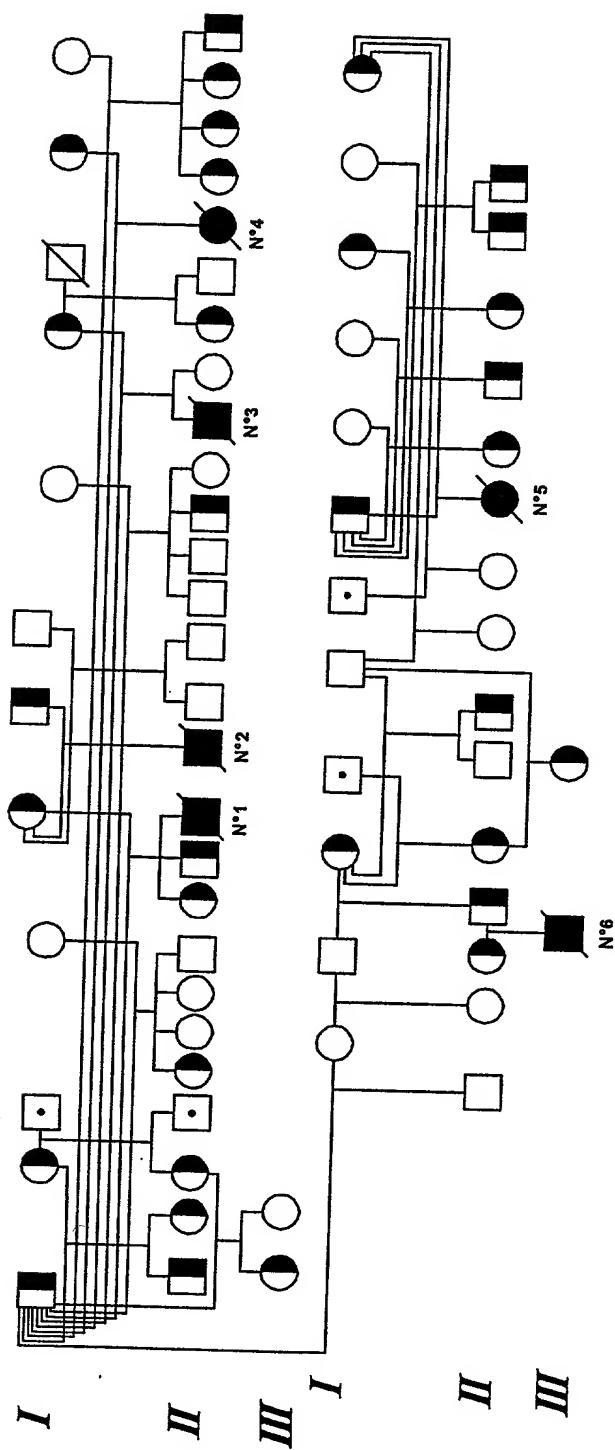


FIG. 6